

TECHNICAL DATA

KSPA12HP

P r o d u c t D e m o n s t r a t i o n



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Kings
3D Printing

Material Overview

KSPA12HP is a high-performance black nylon powder by Kings 3D, designed for industrial SLS 3D printing. It offers excellent impact resistance, high toughness, and superior surface quality, making it ideal for durable functional components. Its robust properties ensure long-term use in demanding applications.

Advantage

- High Elongation
- Impact Resistance
- High Toughness
- Good Surface Quality
- Long-Term Functional Use

Ideal Application

- Functional structures
- Concept prototypes
- Automotive
- Aerospace
- Architecture
- Electronic applications

Technical Datasheet

Mechanical property	Value	Unite	Test standard
Tensile Modulus	1450	MPa	ISO 527
Tensile Strength	≥40	MPa	ISO 527
Strain at break	≥40	%	ISO 527
Charpy notched impact strength	10	KJ/m ²	ISO 179
Thermal properties	Value	Unite	Test standard
Powder Melting temperature (10 °C/min)	187	°C	ISO 11357
Vicat softening temperature (50 °C /h50N)	95	°C	ISO 306
Other properties	Value	Unite	Test standard
Density (lasersintered)	0.98	g/cm ³	Own method
Density (Powder)	0.55	g/cm ³	Own method
Particle Size (D50)	55	μm	Laser Diffraction
Recommended processing parameters	Value	Unite	
Bed Temperature	166~173	°C	
Chamber or Piston Temperature	145~160	°C	
Hatch Power	40~50	W	

The above data are based on our current knowledge and experience, the values of which may vary and depend on individual machine processing and post-curing practices. The safety data given in above is for information purposes only and does not constitute a legally binding MSDS. The relevant MSDS can be obtained upon request from your supplier or you may contact Kings 3D directly at "info@kings3dprinter.com"